



What is ISSMP?

- **The goals and objectives of the ISS Medical Project (ISSMP) are to:**
 - Maximize the utilization the ISS and other spaceflight platforms to assess the effects of long-duration spaceflight on human systems
 - Devise and verify strategies to ensure optimal crew performance
 - Enable development and validation of a suite of integrated physical (e.g., exercise), pharmacologic and/or nutritional countermeasures against deleterious effects of space flight that may impact mission success or crew health.
- **The ISSMP provides planning, integration, and implementation services for Human Research Program research tasks and evaluation activities requiring access to space or related flight resources on the ISS, Shuttle, Soyuz, Progress, or other spaceflight vehicles and platforms.**
 - This includes pre- and postflight activities.
 - ISSMP services include operations and sustaining engineering for HRP flight hardware; experiment integration and operation, including individual research tasks and on-orbit validation of next generation on-orbit equipment; medical operations; procedures development and validation; and crew training tools and processes, as well as operation and sustaining engineering for the Telescience Support Center.
 - The ISSMP integrates the HRP approved flight activity complement and interfaces with external implementing organizations, such as the ISS Payloads Office and International Partners, to accomplish the HRP's objectives. This effort is led by JSC with Baseline Data Collection support from KSC.

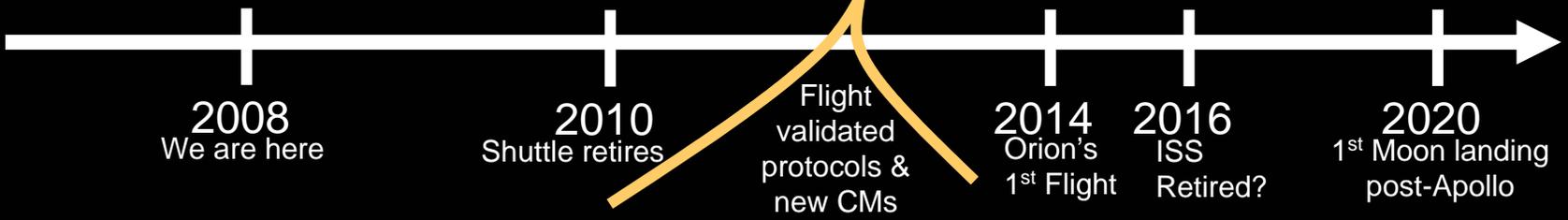


HUMAN RESEARCH PROGRAM – ISS Medical Project

Space Medicine

Responsible for maintaining the crew's health and capability to complete their mission.

Next generation countermeasures to protect the Orion system's human element and mitigate the mission critical risks for extended stays on the moon and Mars.



ISS Medical Project

Maximize the utilization of the ISS and other spaceflight platforms to assess and mitigate the effects of long-duration spaceflight on human systems.

- Flight Validations
- Research & operational data

- Targeted operational questions/evaluations
- Operational assessments
- Potential CMs for flight validation
- Research experiments

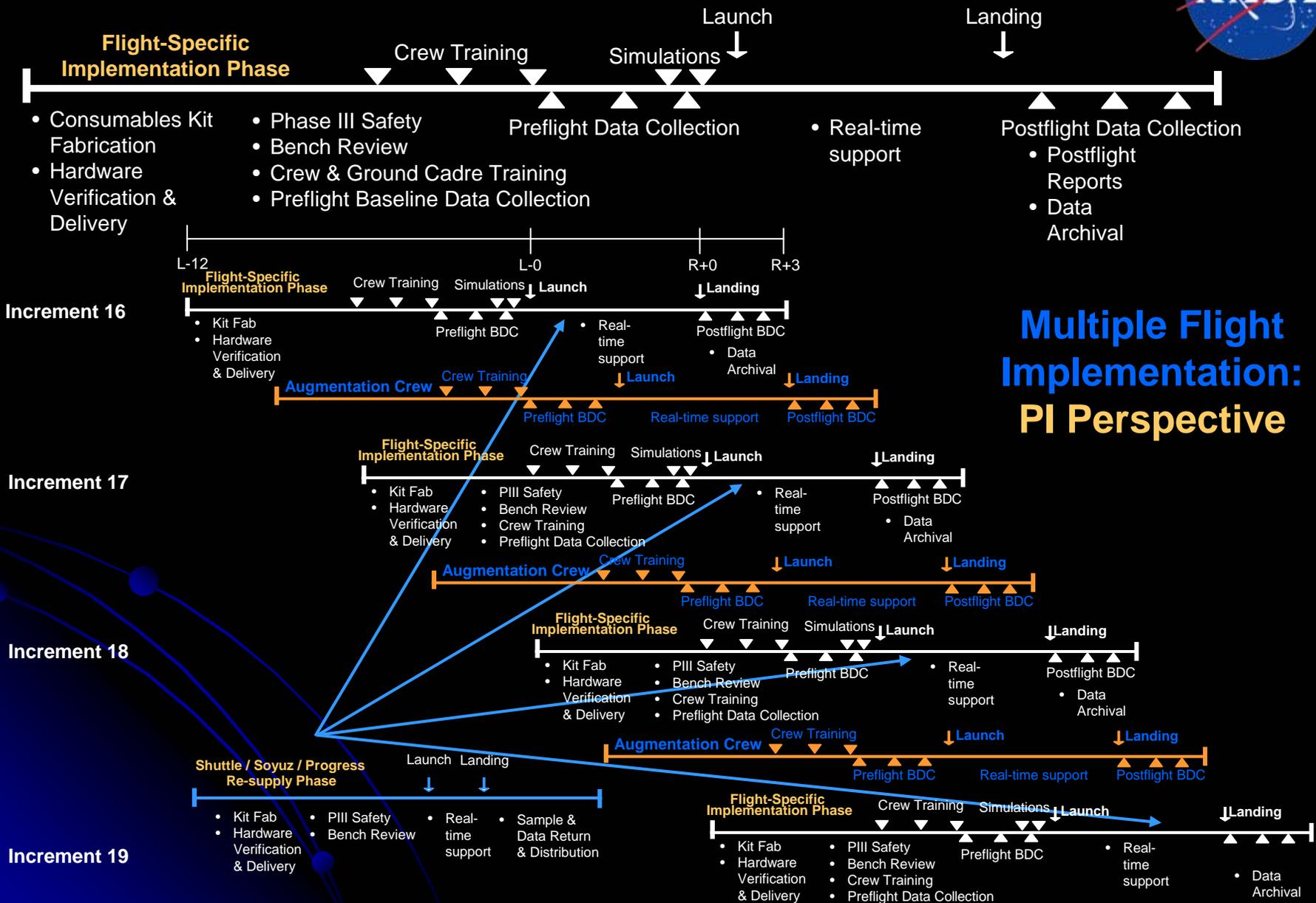
Other HRP Program Elements

- Space Radiation
- Human Health Countermeasures
 - Exercise Physiology
 - NxPCM
 - Flight Analogs
 - Fractional Gravity
 - EVA Physiology, Systems & Performance
- Exploration Medical Capability
- Behavioral Health & Performance
- Space Human Factors & Habitability

ISSMP works with the other HRP Program Elements to provide flight validated countermeasures and operational protocols to mitigate exploration risks.



HUMAN RESEARCH PROGRAM – ISS Medical Project



Multiple Flight Implementation: PI Perspective

ISS Payload Integration Deliverables